

# **Drought in the Rio Grande/Bravo: 1st Technical Scoping Workshop**

August 15-16, 2012

International Boundary and Water Commission

4171 N Mesa St # C310, El Paso, TX

## **Purpose**

There is a pronounced need for timely, relevant, and regional-scale information to support climate services within the Rio Grande/Bravo (RGB) basin. The issue of drought is a primary one in this basin, affecting a range of constituents across a variety of economic and environmental sectors. This scoping workshop will be the first held under the auspices of the North American Climate Services Partnership (NACSP), and will bring together a core group of Mexican, U.S. and Canadian climate services providers to identify opportunities for collaboration and prioritize mutual needs for drought-related data, products, and services in the RGB, including monitoring, reporting, research, and outlooks. This coordination effort will support water resource managers, agricultural interests, and other constituents within the RGB as they respond to future drought events and build capacity to respond to other climate extremes.

## **Key objectives of this workshop**

- Highlight current areas of bilateral climate services collaboration in the RGB;
- Assess opportunities for bilateral coordination in the areas of drought monitoring, reporting, and impact assessment;
- Explore ways in which drought impact assessment in the RGB region can be utilized to enhance the North American Drought Monitor;
- Discuss the current capacity for seasonal and long-lead climate outlooks and identify opportunities for potential enhancements through monitoring, research, and services;
- Begin to plan near- and long-term activities that will enhance existing efforts and/or develop new collaborations within the RGB;
- Identify partners to engage in priority workshop outcomes.

## **Day 1: Wednesday, 15 August 2012**

9:00-9:30

### **Welcome and Introductions**

*Moderators: David Brown, Martin Montero*

- Welcome (Principal Engineer Peña, IBWC)
- Welcome (Principal Engineer Rascon and Elizalde, CILA)
- Brief introductions around the room

9:30-10:30

### **Plenary Session: Why are we here?**

*Moderators: Chad McNutt, Horacio Rubio*

- What is the demand for climate services? - David Brown (20 min)
  - Large-scale drivers (e.g., climate change)
  - Regional-scale drivers (e.g., El Nino/La Nina)
  - Importance of drought in the RGB (e.g., water, agriculture)
  - Using a regional framework for climate service delivery
- What are some example efforts to provide climate services, at international, national, and regional scales? - Meredith Muth (20 min)
  - Global Framework for Climate Services (GFCS)
  - North American Climate Service Partnership (NACSP)
  - National Integrated Drought Information System (NIDIS)
  - U.S. Western Governors Association (WGA) - NOAA Memorandum of Understanding on climate services
- Why focus on bilateral coordination for drought in the RGB? –Chad McNutt (20 min)
  - Who benefits? Key U.S. and Mexican stakeholders
  - New opportunities and enhancements to existing activities
  - Summary of the RGB discussion at the Cancun NADM forum

10:30-11:00

### **Break**

11:00-12:00

### **Plenary Session: How are we collaborating bilaterally and trilaterally on drought issues?**

*Moderators: Gregg Garfin, Rene Lobato*

- Collaboration across North America - Richard Heim/Reynaldo Pascual
  - North American Drought Monitor
  - North American GEO bilateral drought indices and definitions study
  - Drought activities under NACSP
- Collaboration in the RGB: weather and water - Greg Shelton (20 min)
  - Bilateral Data Workgroup activities
  - Hydrologic forecasts during Hurricane Alex
  - NWS engagement of local border communities
- Collaboration in the RGB: climate services - Gregg Garfin (20 min)

- Wildfire
- Webinars
- Other examples

12:00-1:30

### **Lunch**

1:30-3:00

### **Discussion: How do we collaborate bilaterally to improve monitoring and forecasting of drought conditions in the RGB?**

*Moderators: Israel Velasco, Kelly Redmond*

- Monitoring and data exchange: what are we currently doing, and how are we incorporating users of drought information? (20 min)
  - Bi-national data workgroup
  - Other examples
- Monitoring and data exchange: what are some opportunities for new or enhanced collaboration? (20 min)
  - Expansion/enhancement of bi-national data workgroup
  - Expansion of CoCoRaHs into RGB/Mexico
  - Application of drought indices definitions study
  - Other examples
- Climate forecasts and outlooks: what are we currently doing, and how are we incorporating users of drought information? (20 min)
  - NWS/CPC seasonal climate and drought outlooks
  - Experimental forecasts and outlooks (e.g. IRI, CLIMAS, ESRL/CIRES)
  - North American forecast systems (e.g., NASFS, NAEFS)
  - Other examples
- Climate forecasts and outlooks: what are some opportunities for new or enhanced collaboration? (20 min)
  - Are there ways to make NWS/CPC outlooks more useful for RGB constituents? (e.g., downscaling)
  - Are there opportunities to enhance or add to existing experimental regional forecasts and outlooks?
  - Other examples

3:00-3:30

### **Break**

3:30-5:00

### **Discussion: How can bilateral coordination in the RGB contribute to and benefit from the North American Drought Monitor?**

*Moderators: Richard Heim, Sergio Ramirez*

- Background on NADM including development of national inputs (20 min)
- How can drought conditions and impacts in the RGB be better reported and reflected in the NADM? (30 min)
  - Draw from existing state-level activities?

- Bilateral coordination calls?
  - Regional drought outlook and assessment forums?
- How can the usefulness of the NADM be assessed on a regional scale? (30 min)
  - Who is using the NADM in the RGB, what are they using it for, and how are they benefiting from the information?
  - How can an assessment of the NADM's usefulness in the RGB inform and enhance the overall NADM product and process?

5:00

**End of Day 1**

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## **Day 2: Thursday, 16 August 2012**

9:00-9:15

### **Recap of Day 1**

*Moderators: David Brown, Rene Lobato*

9:15-10:45

### **Discussion: How do we collaborate bilaterally to improve the assessment and reporting of drought impacts in the Rio Grande Bravo?**

*Moderators: Mark Svoboda, Horacio Rubio*

- What are we currently doing, and how are we incorporating users of drought information? (40 min)
  - Drought impact reporter (NDMC)
  - CLIMAS bilateral collaboration (Gregg G)
  - Arizona drought watch (Gregg G)
- What are some opportunities for new or enhanced collaboration? (40 min)
  - Applying lessons from other regions
    - Upper Colorado basin early warning system
    - U.S. state drought task forces and drought coordination calls
    - WMO regional climate outlook forums
    - NOAA quarterly regional climate outlooks and assessments
  - Contributions to a national drought impact reporting system
    - Can the RGB be used as a test bed to demonstrate the effectiveness of a national or North American drought impact reporting system?
    - Incorporating impact information into the NADM?

10:45-11:15

**Break**

11:15-12:30

**Next Steps**

*Moderators: David Brown, Martin Montero*

- What are the priority near-term opportunities, based on these discussions, for improved or additional bilateral or trilateral coordination in the RGB for drought services?
  - What additional partners need to be engaged?
  - What resources are available to support coordination?
  - Who has responsibility to lead the coordination effort?
- What are the longer-term priorities and directions for bilateral or trilateral coordination in the RGB for drought services?

12:30

**End of Day 2**

Afternoon open for side meetings and discussions

## Participants in the RGB Technical Scoping Workshop

### U.S. participants

1. David Brown, NOAA Regional Climate Services Director, david.p.brown@noaa.gov
2. Meredith Muth, NOAA Climate Program Office, Meredith.F.Muth@noaa.gov
3. Chad McNutt, National Integrated Drought Information System (NIDIS), chad.mcnutt@noaa.gov
4. Greg Shelton, NOAA NWS, greg.shelton@noaa.gov
5. Gregg Garfin, CLIMAS RISA, gmgarfin@email.arizona.edu
6. Richard Heim, North American Drought Monitor, NOAA/NCDC, richard.heim@noaa.gov
7. Mark Svoboda, National Drought Mitigation Center, msvoboda@unlnotes.unl.edu
8. Wayne Higgins, Climate Prediction Center, NOAA/NWS, wayne.higgins@noaa.gov
9. Dave Dubois, New Mexico State Climatologist, dwdubois@nmsu.edu
10. Kelly Redmond, Western Regional Climate Center, kelly.redmond@dri.edu
11. Jesus A. Haro, El Paso Weather Forecast Office, NOAA/NWS, jesus.haro@noaa.gov
12. Mike Hardiman, El Paso Weather Forecast Office, NOAA/NWS, mike.hardiman@noaa.gov

### Mexico participants

1. Horacio Rubio, GASIR/CONAGUA, horacio.rubio@conagua.gob.mx
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10. Israel Velasco, IMTA Climatologist, ivelasco@tlaloc.imta.mx

### Canada participants

1. Allan Howard, Agriculture and Agri-Food Canada, Allan.Howard@agr.gc.ca
2. Trevor Hadwen, Agriculture and Agri-Food Canada, Trevor.Hadwen@agr.gc.ca

### U.S. International Boundary and Water Commission participants

1. Principal Engineer Carlos Peña, Carlos.Pena@ibwc.gov
2. Principal Engineer John Merino, John.Merino@ibwc.gov
3. William Finn, IBWC, William.Finn@ibwc.gov